**DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO**

**T.B.C. : SLPJ–U–CXJ** **Test Booklet Series**

**Serial No.**

1049053

# TEST BOOKLET

**A**

## PAPER—I

## ( General Medicine and Pediatrics )

**Time Allowed : Two Hours** **Maximum Marks : 250**

### INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET *DOES NOT* HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. **Please note that it is the candidate's responsibility to encode and fill in the Roll Number and Test Booklet Series A, B, C or D carefully and without any omission or discrepancy at the appropriate places in the OMR Answer Sheet. Any omission/discrepancy will render the Answer Sheet liable for rejection.**
3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside. *DO NOT* write *anything else* on the Test Booklet.
4. This Test Booklet contains **120** items (questions). Each item comprises four responses (answers). You will select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose *ONLY ONE* response for each item.
5. You have to mark all your responses *ONLY* on the separate Answer Sheet provided. See directions in the Answer Sheet.
6. ***All*** items carry equal marks.
7. Before you proceed to mark in the Answer Sheet the response to various items in the Test Booklet, you have to fill in some particulars in the Answer Sheet as per instructions sent to you with your Admission Certificate.
8. After you have completed filling in all your responses on the Answer Sheet and the examination has concluded, you should hand over to the Invigilator *only the Answer Sheet*. You are permitted to take away with you the Test Booklet.
9. Sheets for rough work are appended in the Test Booklet at the end.
10. **Penalty for wrong answers :**

    THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY A CANDIDATE IN THE OBJECTIVE TYPE QUESTION PAPERS.

    (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **one-third** of the marks assigned to that question will be deducted as penalty.

    (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above to that question.

    (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be **no penalty** for that question.

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1. Thickened ventricular wall with normal diastolic function is a feature of

   *(a)* hypertrophic cardiomyopathy

   *(b)* restrictive cardiomyopathy

   *(c)* endomyocardial fibrosis

   *(d)* athlete's heart

2. In which of the following cases does paradoxical splitting occur?

   1. Severe aortic stenosis
   2. Right bundle branch block
   3. Right ventricular pacing
   4. Hypertrophic obstructive cardiomyopathy

   Select the correct answer using the code given below.

   *(a)* 1, 2 and 3

   *(b)* 1, 2 and 4

   *(c)* 1, 3 and 4

   *(d)* 2, 3 and 4

3. A patient with peripheral edema has the following findings on clinical examination :

   A soft systolic murmur at the lower left sternal border with raised JVP showing prominent C-V wave. The murmur increases in intensity on deep inspiration

   The most likely valvular abnormality is

   *(a)* ventricular septal defect

   *(b)* mitral regurgitation

   *(c)* tricuspid regurgitation

   *(d)* mitral valve prolapse

4. Kussmaul's sign is a clinical feature of

   *(a)* constrictive pericarditis

   *(b)* hypertrophic obstructive cardiomyopathy

   *(c)* anteroseptal myocardial infarction

   *(d)* dilated cardiomyopathy

5. A patient has a cardiac murmur that is best heard at the right second intercostal space. It increases with expiration. Also, the murmur reduces in intensity during sustained handgrip but increases in intensity on inhalation of amyl nitrite. The likely lesion is

   *(a)* ventricular septal defect

   *(b)* aortic stenosis

   *(c)* hypertrophic obstructive cardiomyopathy

   *(d)* mitral regurgitation

6. In the modified Duke criteria for infective endocarditis, which one of the following is ***not*** a major criterion?

   *(a)* New partial dehiscence of prosthetic valve

   *(b)* Positive blood culture

   *(c)* Roth's spots

   *(d)* New valvular regurgitation

7. Which one of the following diseases affects predominantly large arteries?

   *(a)* Granulomatosis with polyangiitis

   *(b)* Polyarteritis nodosa

   *(c)* Giant cell arteritis

   *(d)* Eosinophilic granulomatosis with polyangiitis

8. Osborn waves in ECG show prolonged repolarization with a distinctive convex elevation of the 'J' point. These waves are associated with

(a) systemic hypothermia

(b) acute pericarditis

(c) acute myocarditis

(d) Brugada syndrome

9. A decline in total lung capacity to less than 80% of patient's predictive value is an indication of

(a) restrictive lung disease

(b) obstructive lung disease

(c) pulmonary artery hypertension

(d) pulmonary embolism

10. A 28-year male is suspected of having hypertrophic obstructive cardiomyopathy (HOCM). Which of the following statements are likely to be true on his examination?

1. Maneuvers that decrease LV preload will cause the murmur to intensify.
2. Maneuvers that decrease LV afterload will cause decrease in intensity of murmur.
3. Murmur of HOCM becomes softer with passive leg raising.
4. Murmur of HOCM becomes louder with squatting.

Select the correct answer using the code given below.

(a) 1 and 3

(b) 2 and 3

(c) 2 and 4

(d) 1 and 4

11. A 56-year male, chronic heavy smoker, presented with breathlessness. On examination, pulse : 96/minute, BP : 112/70 mm Hg and a pansystolic murmur is showing Carvallo's sign with murmur getting louder on deep inspiration. Which one of the following statements is true regarding examination of JVP in him?

(a) V wave is attenuated.

(b) C wave is attenuated and V wave is accentuated.

(c) V wave and C wave merge.

(d) V wave and C wave merge and Y descent is blunted.

12. Which one of the following is a manifestation of vascular phenomenon in modified Duke criteria?

(a) Osler's node

(b) Roth's spots

(c) Janeway's lesions

(d) Glomerulonephritis

13. The volume of air remaining in the lungs after a normal expiration is called

(a) expiratory residual volume

(b) functional residual capacity

(c) residual volume

(d) vital capacity

14. The investigation of choice for early follow-up in patients treated for anti-*H. pylori* drugs is

(a) urea breath test

(b) rapid urease test

(c) stool *H. pylori* antigen test

(d) serology for *H. pylori*

**15.** The most common non-pancreatic site for tumour distribution in Zollinger-Ellison syndrome is

*(a)* duodenum

*(b)* ovaries

*(c)* stomach

*(d)* liver

**16.** Which of the following are the risk factors for the acquisition of hepatitis C infection?

1. Faeco-oral transmission
2. Intravenous drug abuse
3. Vertical transmission
4. Sharing toothbrush and razors

Select the correct answer using the code given below.

*(a)* 1, 2 and 3

*(b)* 1, 2 and 4

*(c)* 1, 3 and 4

*(d)* 2, 3 and 4

**17.** The most common cause of shock in severe acute pancreatitis (SAP) is

*(a)* hypovolemic shock resulting from third space loss

*(b)* septic shock resulting from infected pancreatic necrosis

*(c)* cardiogenic shock resulting from SIRS

*(d)* abdominal compartment syndrome

**18.** The most common causative agent for spontaneous bacterial peritonitis is

*(a)* *Escherichia coli*

*(b)* *Enterococcus* sp.

*(c)* *Staphylococcus aureus*

*(d)* *Streptococcus viridans*

**19.** The serologic marker detectable during 'window' period of hepatitis B infection is

*(a)* anti-HBsAb

*(b)* anti-HBc IgG

*(c)* anti-HBc IgM

*(d)* HBeAg

**20.** A 14-year boy came with chronic diarrhoea and malnutrition. The physician suspected celiac disease. Which of the following are correct in his diagnostic workup?

1. Presence of IgA antiendomysial antibody
2. Absence of reduced height of villi on intestinal biopsy
3. Increased lymphocytes in lamina propria in small intestine biopsy
4. Absence of tTG antibody in serum

Select the correct answer using the code given below.

*(a)* 1, 2 and 3

*(b)* 1, 2 and 4

*(c)* 1, 3 and 4

*(d)* 2, 3 and 4

**21.** Which of the following statements are correct for the treatment of chronic hepatitis B with pegylated interferon (PEG-IFN)?

1. PEG-IFN is poorly tolerated drug as compared to nucleoside analogues.
2. Resistance to treatment with PEG-IFN is common than nucleoside analogues.
3. PEG-IFN is not useful in patients of cirrhosis.
4. PEG-IFN is administered every week for 48 weeks.

Select the correct answer using the code given below.

*(a)* 1, 3 and 4
*(b)* 1, 2 and 3
*(c)* 2 and 4
*(d)* 1 and 3 only

**22.** Which of the following are recommended for management of tumour lysis syndrome?

1. Urinary alkalinization
2. Intravenous fluids
3. Rasburicase
4. Febuxostat

Select the correct answer using the code given below.

*(a)* 1, 2 and 3
*(b)* 1, 2 and 4
*(c)* 1, 3 and 4
*(d)* 2, 3 and 4

**23.** Focal seizures may be associated with which of the following?

1. Jacksonian march
2. Todd's paralysis
3. Epilepsia partialis continua

Select the correct answer using the code given below.

*(a)* 1 and 2 only
*(b)* 2 and 3 only
*(c)* 1 and 3 only
*(d)* 1, 2 and 3

**24.** Typical absence seizures are characterized by

*(a)* abrupt 3 Hz spike-and-slow wave discharges on EEG
*(b)* postictal confusion in children
*(c)* multifocal structural abnormalities of brain
*(d)* less responsiveness to anti-convulsants as compared to atypical absence seizures

**25.** Which of the following are contra-indications to thrombolysis in acute ischemic stroke?

1. Recent head injury
2. Recent MI
3. Hypertension > 150/100 mm Hg
4. GI bleeding in last 3 weeks

Select the correct answer using the code given below.

*(a)* 1, 2 and 3
*(b)* 1, 2 and 4
*(c)* 1, 3 and 4
*(d)* 2, 3 and 4

**26.** Which one of the following distinguishes axonal degeneration from segmental demyelination on electrophysiological studies?

*(a)* Distal latency is normal in axonal degeneration and prolonged in segmental demyelination.

*(b)* Conduction velocity is slow in axonal degeneration and normal in segmental demyelination.

*(c)* Conduction block is present in axonal degeneration and absent in segmental demyelination.

*(d)* Temporal dispersion is prominent in axonal degeneration and absent in segmental demyelination.

**27.** Which one of the following drugs helps to maintain abstinence by reducing craving for alcohol?

*(a)* Apomorphine

*(b)* Acamprosate

*(c)* Atropine

*(d)* Azathioprine

**28.** The BCR-ABL 1 oncoprotein exhibits constitutive activity of which one of the following enzymes?

*(a)* Alanine kinase

*(b)* Tyrosine kinase

*(c)* Leucine kinase

*(d)* Cysteine kinase

**29.** Imatinib, Dasatinib, Nilotinib and Ponatinib are examples of which class of drugs?

*(a)* Interferons

*(b)* Monovalent antibodies

*(c)* Bivalent antibodies

*(d)* Tyrosine kinase inhibitors

**30.** *Helicobacter pylori* infection is associated with the development of which one of the following lymphoid malignancies?

*(a)* Burkitt's lymphoma

*(b)* Hodgkin's lymphoma

*(c)* Mucosa-associated lymphoid tissue lymphoma

*(d)* Adult T-cell leukemia/lymphoma

**31.** The Duffy antigen system serves as receptor for which one of the following protozoal parasites?

*(a)* *Giardia lamblia*

*(b)* *Plasmodium vivax*

*(c)* *Entamoeba histolytica*

*(d)* *Balantidium coli*

**32.** With regard to transfusion therapy, cryoprecipitate is a rich source of which of the following?

1. Fibrinogen
2. Clotting factor VIII
3. Clotting factor IX
4. von Willebrand factor

Select the correct answer using the code given below.

*(a)* 1, 2 and 3

*(b)* 1, 2 and 4

*(c)* 1, 3 and 4

*(d)* 2, 3 and 4

**33.** Which of the following viruses can be transmitted via transfusion of infected blood?

1. Hepatitis B virus
2. Hepatitis C virus
3. Human immunodeficiency virus
4. Parvovirus B19

Select the correct answer using the code given below.

*(a)* 1 and 3 only

*(b)* 2 and 4 only

*(c)* 1, 2 and 3 only

*(d)* 1, 2, 3 and 4

**34.** Which one of the following correctly describes the mode of inheritance of haemophilia B?

*(a)* Autosomal dominant

*(b)* Autosomal recessive

*(c)* X-linked dominant

*(d)* X-linked recessive

**35.** Which one of the following conditions characteristically may present with a triad of haemolysis, pancytopenia and venous thrombosis?

*(a)* Glucose-6-phosphate dehydrogenase deficiency

*(b)* Hereditary spherocytosis

*(c)* Haemolytic uremic syndrome

*(d)* Paroxysmal nocturnal haemoglobinuria

**36.** Which one of the following is associated with low MCV of red blood cells?

*(a)* Thalassemia

*(b)* Vitamin B12 deficiency anaemia

*(c)* Folate deficiency anaemia

*(d)* Sickle cell anaemia

**37.** GnRH deficiency with hyposmia is typically seen in

*(a)* Kallmann syndrome

*(b)* Bardet-Biedl syndrome

*(c)* Prader-Willi syndrome

*(d)* Wallenberg syndrome

**38.** Iodine has complex effects on thyroid function. Very high concentrations of iodine inhibit thyroid hormone synthesis and release. This effect is known as

*(a)* Wolff-Chaikoff effect

*(b)* Jod-Basedow effect

*(c)* reverse Wolff-Chaikoff effect

*(d)* reverse Jod-Basedow effect

**39.** Consider the following pharmacological agents :

1. Propranolol
2. Sodium ipodate
3. Propylthiouracil
4. Liothyronine

Which of the above can be used for the treatment of thyrotoxic crisis?

*(a)* 3 only

*(b)* 1 and 2 only

*(c)* 1, 2 and 3

*(d)* 2, 3 and 4

**40.** Consider the following pharmacological agents :

1. Liothyronine
2. Levothyroxine
3. Carbimazole
4. Sodium ipodate

Which of the above may be included in the treatment of myxoedema coma?

*(a)* 1 only

*(b)* 1 and 2

*(c)* 2 and 3

*(d)* 3 and 4

**41.** Which one of the following insulin preparations has the longest effective duration of action?

*(a)* Detemir

*(b)* Glargine

*(c)* NPH

*(d)* Degludec

**42.** Functioning pituitary adenoma most commonly arises from which one of the following cells?

*(a)* Somatotroph

*(b)* Lactotroph

*(c)* Corticotroph

*(d)* Thyrotroph

**43.** Low serum thyroglobulin levels are seen in

*(a)* thyrotoxicosis factitia

*(b)* subacute thyroiditis

*(c)* Graves' disease

*(d)* toxic multinodular goitre

**44.** A 45-year-old male presented with polyuria, polydipsia and polyphagia for the last 3 months. His fasting plasma glucose is 106 mg/dL and random blood glucose is 220 mg/dL. Which one of the following statements is correct regarding his diagnosis?

*(a)* He has impaired glucose tolerance (IGT).

*(b)* He has definitive diagnosis of diabetes mellitus.

*(c)* He does not have diabetes mellitus.

*(d)* Diagnosis of diabetes mellitus is indeterminate as HbA1c value is not provided.

45. Which one of the following statements is true regarding the use of SGLT2 inhibitor in management of diabetes mellitus?

(a) They are used in type-1, type-2 and pancreatogenic forms of diabetes mellitus.

(b) They cause increase in blood pressure by 3–6 mm Hg and hence avoided in hypertensive patients.

(c) Their glucose-lowering effect is dependent on insulin secretion and insulin sensitivity.

(d) Euglycemic diabetic ketoacidosis may occur during treatment if there is a concurrent illness.

46. A 50-year lady, who is a known case of rheumatoid arthritis, presents with obesity, moon facies, abdominal striae and hypertension. Overnight dexamethasone suppression test shows serum cortisol is greater than 50 nmol/L, serum ACTH is less than 1·1 pmol/L. The adrenal imaging and brain CT/MRI imaging studies are unremarkable. The likely diagnosis is

(a) Cushing's disease

(b) ectopic ACTH-secreting tumour

(c) exogenous glucocorticoid use

(d) adrenal adenoma

47. A 27-year lady underwent thyroidectomy for thyroid carcinoma. Post-operatively she started developing muscle cramps, perioral and peripheral paresthesia, and carpopedal spasm. Which one of the following interventions will be appropriate for this patient?

(a) Nerve conduction velocity in both upper and lower limbs and to administer methylcobalamin

(b) EMG of both lower limbs and to administer oral prednisolone

(c) Measure of serum ionized calcium and to administer IV calcium gluconate

(d) Measure of serum bicarbonate and to administer IV bicarbonate

48. Which one of the following is an example of hypogonadotropic hypogonadism?

(a) Kallmann's syndrome

(b) Klinefelter's syndrome

(c) Turner's syndrome

(d) Cryptorchidism

49. A tall thin adolescent boy is found to have gynaecomastia and small testes. His blood testosterone level is undetectable, and serum FSH and LH levels are elevated. Which one of the following is the likely karyotype pattern?

(a) 46 XY

(b) 45 XO

(c) 47 XXY

(d) 21 Trisomy

50. Which of the following antidiabetic drugs may cause weight gain?

1. Glimepiride
2. Pioglitazone
3. NPH insulin
4. Sitagliptin

Select the correct answer using the code given below.

(a) 1, 2 and 3

(b) 1, 2 and 4

(c) 1, 3 and 4

(d) 2, 3 and 4

**51.** Which of the following statements is/are correct for obesity?

1. Adiponectin levels are reduced in obesity.
2. Orlistat is a reversible inhibitor of lipase used for the treatment of obesity.
3. Liraglutide used for T2DM management can cause weight gain and not recommended in obese patients with T2DM.
4. Bariatric surgery is recommended in obese patients with BMI > 30 $kg/m^2$ for long-term benefits.

Select the correct answer using the code given below.

*(a)* 1, 2 and 4
*(b)* 1 and 2 only
*(c)* 2, 3 and 4
*(d)* 1 only

**52.** Which of the following drugs are effective in preventing uric acid nephropathy in patients receiving chemotherapy?

1. Probenecid
2. Forced saline diuresis
3. Rasburicase
4. Acetazolamide

Select the correct answer using the code given below.

*(a)* 1, 2 and 3
*(b)* 1, 2 and 4
*(c)* 1, 3 and 4
*(d)* 2, 3 and 4

**53.** Primaquine destroys hypnozoites of *Plasmodium vivax* for radical cure in which one of the following?

*(a)* Liver
*(b)* Peripheral blood
*(c)* Brain
*(d)* Bone marrow

**54.** HIV-associated neurocognitive disorder (HAND) includes which of the following?

1. Asymptomatic neurocognitive disorder
2. Minor neurocognitive disorder
3. HIV-associated dementia

Select the correct answer using the code given below.

*(a)* 1 and 2 only
*(b)* 2 and 3 only
*(c)* 1 and 3 only
*(d)* 1, 2 and 3

**55.** Consider the following statements with regard to cysticercosis :

1. It may present as personality change.
2. Subcutaneous nodule may be excised for histology.
3. Cerebral signs commonly do not occur until the larvae die, 5–20 years later.
4. Praziquantel can be given for 10 days.

Which of the statements given above are correct?

*(a)* 1 and 4 only
*(b)* 2 and 3 only
*(c)* 1, 2 and 3 only
*(d)* 1, 2, 3 and 4

**56.** Consider the following statements with regard to strongyloidiasis :

1. It parasitizes the mucosa of upper part of small intestine.
2. Larva currens is fast-moving transient rash seen across abdomen and buttocks.
3. Ivermectin is not an effective treatment.
4. Systematic strongyloidiasis is seen in immune competent state.

Which of the statements given above are correct?

*(a)* 1 and 2

*(b)* 2 and 3 only

*(c)* 2, 3 and 4

*(d)* 1 and 4

**57.** Consider the following statements with regard to cutaneous larva migrans :

1. It is one of the commonest linear lesions seen in travellers.
2. It may be associated with a recent visit to a beach.
3. It is non-pruritic.
4. Track moves across the skin at a rate of 2–3 cm/day.

Which of the statements given above are correct?

*(a)* 1, 2 and 3

*(b)* 1, 3 and 4

*(c)* 1, 2 and 4

*(d)* 2, 3 and 4

**58.** Consider the following statements with regard to giardiasis :

1. Stools should be examined for cysts at 2–3 days interval for its diagnosis.
2. Colonoscopy aspirate gives the highest diagnostic yield.
3. Infection usually occurs by ingesting contaminated water.
4. Giardia has a flagellate trophozoite form.

Which of the statements given above are correct?

*(a)* 1 and 3 only

*(b)* 1, 2 and 4

*(c)* 1, 3 and 4

*(d)* 2 and 4 only

**59.** Type-2 necrotizing fasciitis is caused by

*(a)* Group A *Streptococcus*

*(b)* *Vibrio vulnificus*

*(c)* *Clostridium septicum*

*(d)* *Staphylococcus aureus*

**60.** Which of the following treatments for a pregnant lady who has been exposed to a patient of chicken pox are correct?

1. Varicella-zoster immune globulin
2. Varicella-zoster vaccine
3. Acyclovir
4. Prednisolone

Select the correct answer using the code given below.

*(a)* 1, 2 and 4

*(b)* 2 and 3

*(c)* 1 and 3 only

*(d)* 1, 3 and 4

**61.** Which of the following drugs is/are useful in the treatment of *Listeria monocytogenes* infection?

1. Ceftriaxone
2. Gentamicin
3. Ampicillin
4. Sulfamethoxazole

Select the correct answer using the code given below.

*(a)* 1 only
*(b)* 2, 3 and 4 only
*(c)* 1 and 2 only
*(d)* 1, 2, 3 and 4

**62.** Which of the following abnormalities occur from vitamin D deficiency in children?

1. Craniotabes
2. Bossing of frontal and parietal bones
3. Muscle hypotonia
4. Shrinking of epiphysis at the lower end of radius

Select the correct answer using the code given below.

*(a)* 1, 2 and 3
*(b)* 1, 2 and 4
*(c)* 1, 3 and 4
*(d)* 2, 3 and 4

**63.** Which one of the following is a cause of relative erythrocytosis?

*(a)* High altitude
*(b)* Cardiorespiratory disease
*(c)* High-affinity haemoglobins
*(d)* Diuretics

**64.** Which of the following statements are correct regarding UTI?

1. Urine is an excellent culture medium for bacteria.
2. Atrophic urethritis in post-menopausal women is a risk factor.
3. Antibiotics are recommended in all cases of asymptomatic bacteriuria.
4. Certain strains of *E. coli* have a particular propensity to invade urinary tract.

Select the correct answer using the code given below.

*(a)* 1 and 4 only
*(b)* 1, 2 and 3
*(c)* 2, 3 and 4
*(d)* 1, 2 and 4

**65.** Which of the following statements are correct regarding scorpion stings?

1. Scorpion injects venom from a stinger on their tail.
2. Most stings are painful, but relatively harmless.
3. Anticholinergics can be used if antivenom is unavailable.

Select the correct answer using the code given below.

*(a)* 1 and 2 only
*(b)* 2 and 3 only
*(c)* 1 and 3 only
*(d)* 1, 2 and 3

**66.** Which of the following statements are correct regarding Kyasanur forest disease?

1. It is commonly seen in North-Eastern States of India.
2. Monkeys act as reservoir of the disease.
3. Transmission happens through tick bite.
4. Inactivated vaccine is available for its prevention.

Select the correct answer using the code given below.

*(a)* 1 and 4 only
*(b)* 2 and 3 only
*(c)* 1, 2 and 4
*(d)* 2, 3 and 4

**67.** Which of the following statements are correct regarding brucellosis?

1. Fever may develop into an undulating pattern that persists for weeks.
2. Associated musculoskeletal symptoms are a feature of the disease.
3. Brucellae behave as facultative intracellular parasites.

Select the correct answer using the code given below.

*(a)* 1 and 2 only
*(b)* 2 and 3 only
*(c)* 1 and 3 only
*(d)* 1, 2 and 3

**68.** A 60-year-old diabetic female presents with acute myocardial infarction. ECG changes include ST elevation greater than 1 mm in lead aVR. The likely localization of thrombosis is in

*(a)* right coronary artery
*(b)* distal LAD
*(c)* left circumflex artery
*(d)* left main or proximal LAD

**69.** Which one of the following antidiabetic drugs is recommended for weight loss in obese patients?

*(a)* Glimepiride
*(b)* Liraglutide
*(c)* Sitagliptin
*(d)* Insulin

**70.** Consider the following statements regarding inflammatory bowel disease :

1. Ulcerative colitis (UC) involves terminal ileum and rarely causes proctitis.
2. Cobblestone appearance of bowel is seen in Crohn's disease.
3. Skip lesions are a characteristic of ulcerative colitis but never seen in Crohn's disease.
4. Ulcerative colitis is more common in smokers than non-smokers.

Which of the statements given above is/are correct?

*(a)* 1, 2 and 3
*(b)* 2, 3 and 4
*(c)* 3 and 4 only
*(d)* 2 only

**71.** Which of the following are typical physical findings in pericardial effusion?

1. Raised JVP
2. Hypotension
3. Oliguria
4. Water hammer pulse

Select the correct answer using the code given below.

*(a)* 1, 2 and 3

*(b)* 1, 2 and 4

*(c)* 1, 3 and 4

*(d)* 2, 3 and 4

**72.** Which of the following conditions can produce a third heart sound ($S_3$) on auscultation?

1. Young age
2. Pregnancy
3. Left ventricular failure
4. Mitral stenosis

Select the correct answer using the code given below.

*(a)* 1, 2 and 3

*(b)* 1, 2 and 4

*(c)* 1, 3 and 4

*(d)* 2, 3 and 4

**73.** Which of the following statements are true about PR interval?

1. It denotes atrial depolarization.
2. Normal duration is 0·12 second–0·20 second.
3. Prolongation denotes impaired AV nodal conduction.
4. A short PR interval occurs in WPW syndrome.

Select the correct answer using the code given below.

*(a)* 1, 2 and 3

*(b)* 1, 2 and 4

*(c)* 1, 3 and 4

*(d)* 2, 3 and 4

**74.** Which one of the following is the drug of choice for the treatment of schistosomiasis?

*(a)* Doxycycline

*(b)* Praziquantel

*(c)* Albendazole

*(d)* Ivermectin

**75.** Which of the following opportunistic systemic mycoses is characterized by rapid development of severe tissue necrosis and emerged as specific complication associated with COVID-19 infection in India?

*(a)* Histoplasmosis

*(b)* Mucormycosis

*(c)* Coccidioidomycosis

*(d)* Sporotrichosis

**76.** Which of the following fungal infections is caused by dermal inoculation of the fungal agent, usually from a thorn?

*(a)* Mycetoma

*(b)* Aspergillosis

*(c)* Mucormycosis

*(d)* Sporotrichosis

**77.** Consider the following statements with regard to coccidioidomycosis :

1. It is a primary systemic mycosis caused by dimorphic fungi *Coccidioides immitis* and *Coccidioides posadasii.*
2. Primary pulmonary coccidioidomycosis presents with cough, fever, chest pain and arthritis.
3. Progressive pulmonary coccidioidomycosis presents with constitutional symptoms like fever, weight loss, anorexia and features of lobar pneumonia.
4. *Coccidioides* meningitis is a mild disease, not warranting any treatment.

Which of the statements given above are correct?

*(a)* 1, 2 and 3

*(b)* 1, 2 and 4

*(c)* 1, 3 and 4

*(d)* 2, 3 and 4

**78.** Consider the following statements with regard to elapid snakebite :

1. Regardless of the anatomic site of bite, walking of victim should be discouraged.
2. Pressure immobilization should be used, wherever possible.
3. Ptosis can be present after the elapid bite.

Which of the statements given above are correct?

*(a)* 1 and 2 only

*(b)* 2 and 3 only

*(c)* 1 and 3 only

*(d)* 1, 2 and 3

**79.** Which one of the following hormones is responsible for gallbladder contraction and release of bile into duodenum?

*(a)* Secretin

*(b)* Gastrin

*(c)* Cholecystokinin

*(d)* Vasoactive intestinal peptide

**80.** Consider the following statements regarding radiation enteritis and proctocolitis :

1. Diarrhoea in the acute phase should be treated with codeine or loperamide.
2. Surgery is the treatment of choice and involves resection of the injured intestine.
3. Sucralfate enemas and hyperbaric oxygen are effective treatments.
4. Small bowel strictures and rectovaginal fistulae may develop as chronic complications.

Which of the statements given above are correct?

*(a)* 1 and 3 only

*(b)* 2 and 4 only

*(c)* 1, 2 and 4

*(d)* 1, 3 and 4

**81.** In serological investigation of hepatitis B virus infection, presence of hepatitis B e-antigen (HBeAg) is an indicator of
*(a)* active replication of virus in the liver
*(b)* acute liver failure
*(c)* chronic infection with hepatitis B virus
*(d)* inactive carrier phase of infection

**82.** Simultaneous infection with hepatitis B virus (HBV) and hepatitis D virus (HDV) followed by full recovery is associated with the appearance of
*(a)* low titres of anti-HDV antibody, IgM type
*(b)* low titres of anti-HDV antibody, IgA type
*(c)* high titres of anti-HDV antibody, IgM type
*(d)* high titres of anti-HDV antibody, IgG type

**83.** Consider the following statements with regard to jaundice :
1. Presence of scleral icterus indicates a serum bilirubin level of at least 3 mg/dL.
2. If the examiner suspects scleral icterus, second site to examine is underneath the tongue.
3. In long-standing jaundice, skin may become green due to reduction of bilirubin to biliverdin.
4. Sclerae have a particular affinity for bilirubin due to its high elastin content.

Which of the statements given above are correct?
*(a)* 1 and 3 only
*(b)* 2 and 4 only
*(c)* 1, 2 and 4 only
*(d)* 1, 2, 3 and 4

**84.** Carotenoderma, due to ingestion of excessive amounts of carotene-containing fruits and vegetables, can be distinguished from jaundice by sparing of which of the following?
*(a)* Palms
*(b)* Soles
*(c)* Nasolabial folds
*(d)* Sclerae

**85.** Meares-Stamey test is used in which one of the following clinical conditions?
*(a)* Recurrent urinary tract infection in men
*(b)* Urinary tract infection in pregnant women
*(c)* Complicated cystitis in non-pregnant women
*(d)* Pelvic inflammatory disease

**86.** Which one of the following drugs is associated with calciphylaxis in chronic kidney disease patients?
*(a)* Calcium channel blocker
*(b)* Warfarin
*(c)* Non-calcium-based phosphate binder
*(d)* Thiazide diuretic

**87.** Consider the following pairs :

| *Urinary sediments seen in AKI* | | *Diagnosis* |
|---|---|---|
| 1. RBC casts | : | Malignant hypertension |
| 2. WBC casts | : | Pyelonephritis |
| 3. Pigmented casts | : | Vasculitis |
| 4. Granular casts | : | Myoglobinuria |

How many of the pairs given above are correctly matched?
*(a)* Only one pair
*(b)* Only two pairs
*(c)* Only three pairs
*(d)* All four pairs

**88.** Which one of the following is the primary underlying mechanism of haemolysis in paroxysmal nocturnal haemoglobinuria (PNH)?

*(a)* ABO incompatibility

*(b)* Red cell fragmentation

*(c)* Complement-mediated destruction of CD59(–) red blood cells

*(d)* Exotoxins produced by *Clostridium perfringens*

**89.** Which one of the following is a clonal haematopoietic stem cell disorder in which phenotypically normal red blood cells, granulocytes and platelets accumulate in the absence of a recognizable physiological stimulus?

*(a)* Mastocytosis

*(b)* Polycythemia vera

*(c)* Primary myelofibrosis

*(d)* Essential thrombocytosis

**90.** Which of the following insulins has a cloudy preparation and requires resuspension prior to injection?

*(a)* Lente

*(b)* Glargine

*(c)* Detemir

*(d)* Degludec

**91.** Which of the following statements are correct with regard to anorexia nervosa?

1. The illness is often precipitated by weight loss.
2. Food avoidance is common.
3. Body image is intact and there is no fear of weight gain.
4. Downy hair (lanugo) may develop on back, forearms and cheeks.

Select the correct answer using the code given below.

*(a)* 1, 2 and 3

*(b)* 1, 2 and 4

*(c)* 1, 3 and 4

*(d)* 2, 3 and 4

**92.** Which of the following are adverse effects of loop-acting and thiazide diuretics?

1. Metabolic acidosis
2. Hypovolemia
3. Hyponatremia
4. Hypokalaemia

Select the correct answer using the code given below.

*(a)* 1, 2 and 3

*(b)* 1, 2 and 4

*(c)* 1, 3 and 4

*(d)* 2, 3 and 4

**93.** Which one of the following statements is correct with regard to peptic ulcer prophylaxis?

*(a)* Stress ulceration during clinical illness is uncommon.

*(b)* Ulcer prophylaxis should be continued once absorption of enteral feed is established.

*(c)* Proton-pump inhibitors (PPIs) are effective at reducing the incidence of ulceration.

*(d)* PPIs when used with antibiotics may decrease the risk of *Clostridium difficile* infection.

**94.** Which of the following are the features of post-lumbar puncture headache?

1. Dull aching occipitofrontal headache
2. Worse on waking but improves during the day
3. Recumbency usually improves the headache within minutes

Select the correct answer using the code given below.

*(a)* 1 and 2 only

*(b)* 2 and 3 only

*(c)* 1 and 3 only

*(d)* 1, 2 and 3

**95.** Which of the following are correct with regard to alpha-1-antitrypsin deficiency?

1. Prolonged jaundice in neonatal period
2. Pulmonary emphysema in adulthood
3. Panniculitis is seen rarely
4. Autosomal dominant disorder

Select the correct answer using the code given below.

*(a)* 1, 2 and 3

*(b)* 1, 2 and 4

*(c)* 1, 3 and 4

*(d)* 2, 3 and 4

**96.** Which of the following drugs can cause granulomatous liver injury?

1. Carbamazepine
2. Allopurinol
3. Diltiazem
4. Acetaminophen

Select the correct answer using the code given below.

*(a)* 1, 2 and 3

*(b)* 1, 2 and 4

*(c)* 1, 3 and 4

*(d)* 2, 3 and 4

**97.** Which of the following are the five essential components of nurturing care?

1. Health
2. Nutrition
3. Breastfeeding
4. Responsive caregiving
5. Early learning
6. Immunization
7. Safety and security
8. Supplementation

Select the correct answer using the code given below.

*(a)* 1, 2, 4, 5 and 7

*(b)* 1, 2, 3, 4 and 5

*(c)* 1, 4, 6, 7 and 8

*(d)* 2, 3, 5, 6 and 8

**98.** A full-term baby born with birth weight of 2000 g comes for well-baby visit at two months of age. Which of the following nutritional supplements would you advise?

*(a)* Vitamin D orally 200 IU/day up to 3 months of age

*(b)* Vitamin D orally 200 IU/day up to 1 year of age

*(c)* Iron orally 2 mg/kg/day up to 3 months of age

*(d)* Iron orally 2 mg/kg/day up to 1 year of age

**99.** Which of the following are common problems in babies with intrauterine growth restriction delivered at term gestation?

1. Hypothermia
2. Hypoglycemia
3. Hypocalcemia

Select the correct answer using the code given below.

*(a)* 1 and 2 only

*(b)* 2 and 3 only

*(c)* 1 and 3 only

*(d)* 1, 2 and 3

**100.** Which one of the following statements is correct regarding a normal newborn's growth?

*(a)* Weight loss may be 8–10% of birth weight in the initial two weeks of life.

*(b)* Birth weight is regained by 7–10 days of age.

*(c)* Birth weight is regained within first week of life.

*(d)* Weight loss may be 12–15% of birth weight in the initial two weeks of life.

**101.** For developmental assessment of a baby, grasp is best assessed by offering the child

*(a)* a red ring

*(b)* a red cube

*(c)* red pellets

*(d)* multicoloured pellets

**102.** Urinary alkalinization as a method for enhancing excretion for poisoning is aimed at achieving

*(a)* serum pH 7·5–8

*(b)* urine pH 7·5–8

*(c)* serum pH > 8

*(d)* urine pH > 8

**103.** Exchange transfusion as a method to enhance excretion of poison is indicated in

*(a)* methemoglobinemia

*(b)* carbamazepine poisoning

*(c)* theophylline poisoning

*(d)* barbiturate poisoning

**104.** In case of a child with an acute poisoning by ingestion, activated charcoal may be used in which one of the following situations?

*(a)* Iron ingestion

*(b)* Antiepileptic ingestion

*(c)* Corrosive ingestion

*(d)* Lithium ingestion

**105.** Which of the following genetic causes are commonly associated with autism spectrum disorders?

1. Angelman syndrome
2. Fragile X syndrome
3. Tuberous sclerosis
4. Williams syndrome

Select the correct answer using the code given below.

*(a)* 1, 2 and 3

*(b)* 1, 2 and 4

*(c)* 1, 3 and 4

*(d)* 2, 3 and 4

**106.** To reduce the risk of neural tube defects in the baby, which of the following are recommended?

*(a)* Folate supplements, from one month before conception to three months after

*(b)* Folate supplements, from confirmation of pregnancy to the end of first trimester

*(c)* Zinc supplements, from one month before conception to three months after

*(d)* Zinc supplements, from confirmation of pregnancy to the end of first trimester

**107.** Vaccine-associated poliomyelitis is chiefly seen with which of the following strains of oral poliovirus?

*(a)* OPV 1 only

*(b)* OPV 2

*(c)* OPV 3 only

*(d)* Both OPV 1 and OPV 3

**108.** Which one of the following is categorized as a specific learning disability?

*(a)* Dysgraphia

*(b)* Dystonia

*(c)* Dysthymia

*(d)* Dysphoria

**109.** A baby is delivered at 34 weeks' gestation and found to be apneic at birth. After performing the initial steps of resuscitation, the baby is still apneic. The next step should be

*(a)* tactile stimulation

*(b)* positive pressure ventilation using 30% oxygen

*(c)* positive pressure ventilation using 100% oxygen

*(d)* chest compression

**110.** A child requires detailed developmental evaluation if the developmental quotient is below

*(a)* 70%

*(b)* 75%

*(c)* 80%

*(d)* 85%

**111.** The upper limit of age for attainment of visual fixation or following is

*(a)* birth

*(b)* 1 month

*(c)* 2 months

*(d)* 3 months

**112.** A child develops 'stranger anxiety' at

*(a)* 2–3 months

*(b)* 4–5 months

*(c)* 6–7 months

*(d)* 8–9 months

**113.** Consider the following statements with respect to developmental milestones at 9 months of age :

1. At this age, child develops immature pincer grasp.
2. At this age, child can say bisyllables (mama, dada, etc.).
3. At this age, child can wave bye-bye.

Which of the statements given above are correct?

*(a)* 1 and 2 only

*(b)* 2 and 3 only

*(c)* 1 and 3 only

*(d)* 1, 2 and 3

**114.** What are the upper age limits by which a child should start walking alone, and be able to speak single words?

*(a)* 12 months, 15 months respectively

*(b)* 15 months, 18 months respectively

*(c)* 15 months, 15 months respectively

*(d)* 18 months, 18 months respectively

**115.** A child presents to the emergency following ingestion of around 20 mL of kerosene oil about 40 minutes back. The child appears stable. Which one of the following measures should be done for the management of the child?

*(a)* Gastric lavage

*(b)* Oxygen therapy

*(c)* Intravenous steroids

*(d)* Radiography

**116.** The event related to vaccination which can be contraindication for the next vaccination of similar/identical type is

*(a)* syncope following MMR vaccine

*(b)* encephalopathy following DPT vaccine

*(c)* abscess at injection site after DPT vaccine

*(d)* gastroenteritis following MMR vaccine

**117.** Which of the following events could be caused or precipitated by an active component of vaccine?

1. Anaphylaxis after measles vaccine
2. Encephalopathy after DPT vaccine
3. Adenitis following BCG vaccine
4. Gastroenteritis following MMR vaccine

Select the correct answer using the code given below.

*(a)* 1, 2 and 3

*(b)* 1, 2 and 4

*(c)* 1, 3 and 4

*(d)* 2, 3 and 4

**118.** Which one of the following can be used for developmental screening for use in community to identify children (aged 0–6 years) with developmental delay?

*(a)* Revised Denver Development Screening Test (Denver II)

*(b)* Ages and Stages Questionnaire (ASQ-3)

*(c)* Phatak's Baroda Development Screening Test

*(d)* Trivandrum Development Screening Chart

**119.** According to the WHO clinical criteria, which of the following clinical signs are indicative of 'severe pneumonia or very severe disease' in children aged 2 months to 5 years?

1. Convulsions
2. Lower chest indrawing
3. Inability to feed
4. Stridor

Select the correct answer using the code given below.

*(a)* 1, 2 and 3

*(b)* 1, 2 and 4

*(c)* 1, 3 and 4

*(d)* 2, 3 and 4

**120.** An eleven-month-old unimmunized child comes for immunization. Which vaccines should be given in this visit?

*(a)* BCG, OPV, DPT and Hepatitis B vaccines

*(b)* OPV, DPT and MR vaccines only

*(c)* BCG, DPT and MR vaccines

*(d)* OPV, DPT, MR and Hepatitis B vaccines

**SPACE FOR ROUGH WORK**

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| Q (CODE A) | A ( PAPER-1) | Q (CODE-A) | A (PAPER-1) | Q (CODE-A) | A (PAPER-1) |
|---|---|---|---|---|---|
| 1 | D | 41 | D | 81 | A |
| 2 | C | 42 | B | 82 | A |
| 3 | C | 43 | A | 83 | C |
| 4 | A | 44 | B | 84 | D |
| 5 | C | 45 | D | 85 | A |
| 6 | C | 46 | C | 86 | B |
| 7 | C | 47 | C | 87 | B |
| 8 | A | 48 | A | 88 | C |
| 9 | A | 49 | C | 89 | B |
| 10 | A | 50 | A | 90 | A |
| 11 | C | 51 | B | 91 | B |
| 12 | C | 52 | A | 92 | D |
| 13 | B | 53 | A | 93 | C |
| 14 | A | 54 | D | 94 | C |
| 15 | A | 55 | D | 95 | A |
| 16 | D | 56 | A | 96 | A |
| 17 | B | 57 | C | 97 | A |
| 18 | A | 58 | C | 98 | D |
| 19 | C | 59 | A | 99 | A |
| 20 | A | 60 | C | 100 | A |
| 21 | A | 61 | D | 101 | B |
| 22 | A | 62 | A | 102 | B |
| 23 | D | 63 | D | 103 | A |
| 24 | A | 64 | D | 104 | B |
| 25 | B | 65 | D | 105 | A |
| 26 | A | 66 | D | 106 | A |
| 27 | B | 67 | D | 107 | B |
| 28 | B | 68 | D | 108 | A |
| 29 | D | 69 | B | 109 | B |
| 30 | C | 70 | D | 110 | A |
| 31 | B | 71 | A | 111 | C |
| 32 | B | 72 | A | 112 | C |
| 33 | D | 73 | D | 113 | D |
| 34 | D | 74 | B | 114 | D |
| 35 | D | 75 | B | 115 | D |
| 36 | A | 76 | D | 116 | B |
| 37 | A | 77 | A | 117 | A |
| 38 | A | 78 | B | 118 | A |
| 39 | C | 79 | C | 119 | B |
| 40 | B | 80 | D | 120 | A |

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